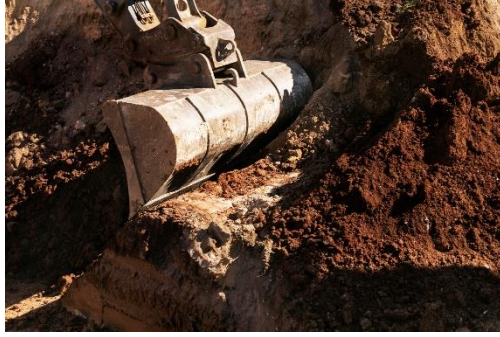




Definition and Risk Overview

Under **WAC 296-155-650**, an **excavation** is any person-made cut, cavity, trench, or depression in the earth's surface formed by earth removal. A **trench** is a narrow excavation where the depth exceeds the width, and the width at the bottom is **15 feet or less**. If forms or structures reduce the bottom width to 15 feet (4.6 m) or less, the excavation is considered a trench.

Importantly, **one cubic yard of soil can weigh up to 3,000 pounds**, roughly the weight of a small car. Accordingly, trench and excavation operations carry significant risk. In fact, according to OSHA data, the fatality rate for excavation work is **112% higher** than for general construction; "employee injury from collapse" is the primary hazard, and "no protective system" is a leading cause.

Competent Person (CP)

- Identifies hazards, has stop-work authority, and knows **WAC 296-155-655**.
- Inspects **before the project, daily before work, as needed during the shift, and after rain/other events**.

Soil Evaluation

- Perform **visual + manual tests** (plasticity, thumb, penetrometer).
- Check: cohesive vs granular, vibrations, prior disturbance/utilities, **water seepage**, fissures/sloughing.

Soil Types

- **Type A:** UCS ≥ 1.5 tsf (not A if fissured, disturbed, wet, or vibrating).
- **Type B:** UCS **0.5–1.5 tsf** or otherwise A but fissured/near vibration.
- **Type C:** UCS ≤ 0.5 tsf; sand/gravel; **any seeping soil**.
- **Increase protection** as stability decreases (especially Type C).

Access/Egress (≥ 4 ft)

- Ladder/steps within **25 ft** lateral travel.
- Earth ramp only if stable footing, ≤ 25 ft travel, and protected (shored) along the route.

Hazardous Atmospheres

- Test before entry **> 4 ft** where deficiency or contaminants are possible (e.g., landfills/near chemicals).
- Ventilate/monitor/use PPE; **re-test** before resuming work.

Call 811

- Request utility locates **before digging** to prevent strikes and outages.

Inspections & Corrections

- CP inspects excavation, adjacent areas, and protections **daily/throughout/after events**.
- If signs of cave-in/system failure/hazard: **remove workers immediately** and **correct** before continuing.